

IN THE CLAIMS

1-30 (canceled)

31. (currently amended) A mixture comprising:

at least one substance A in the form of electrically conductive hard particle having a Mohs hardness of at least 5.5;

at least one substance B in the form of very soft or soft, inorganic, electrically conductive or semiconducting particle which are capable of sliding,

at least one substance C in the form of a metallic, soft or hard, electrically conductive or semiconducting particle or carbon black;

at least one binder; and

at least one of a crosslinking agent or a photoinitiator and optionally at least one post-crosslinking compound, one additive, one corrosion protection pigment D, one corrosion inhibitor which is not present in particle form, and at least one of organic solvent or water, wherein A, B and C are water-insoluble or sparingly water-soluble pigments, wherein the sum of the weight contents of the at least one substance B and the at least one substance C makes up 0.25 to 99.5 % of the weight content of the water-insoluble or sparingly water-soluble pigmentation $\Sigma (A + B + C)$, and the particle size of substance A, based on the particle size transfer value d_{99} measured with a Mastersizer of type S from Malvern Instruments, is less than 10 μm , and wherein the sum of the weight contents of the water-insoluble or sparingly water-soluble pigmentation $\Sigma (A + B + C)$ relative to the sum of the total pigmentation $\Sigma (A + B + C + D)$ is 30 to 99 wt.%.

32. (canceled)

33. (previously presented) A mixture according to claim 31, wherein the mixture of all the types of electrically conductive hard particles A has an average particle size d_{50} of from 0.1 to 2.5 microns.

34. (previously presented) A mixture according to claim 31, wherein the mixture of all the types of electrically conductive hard particles A has an average particle size d_{50} of from 0.2 to 2 microns.

35. (previously presented) A mixture according to claim 31, wherein the mixture of all the types of electrically conductive hard particles A has an average particle size d_{50} of from 0.2 to 2.5 microns.

36. (previously presented) A mixture comprising:
at least one substance A in the form of electrically conductive hard particle having a Mohs hardness of at least 5.5;

at least one substance B in the form of very soft or soft, inorganic, electrically conductive or semiconducting particle which are capable of sliding,

at least one substance C in the form of a metallic, soft or hard, electrically conductive or semiconducting particle or carbon black;

at least one binder; and

at least one of a crosslinking agent or a photoinitiator, one additive, one corrosion protection pigment D, one corrosion inhibitor which is not present in particle form; and at least one of an organic solvent or water,

wherein A, B and C are water-insoluble or sparingly water-soluble pigments, wherein the sum of the weight contents of the at least one substance B and the at least one substance C makes up 0.25 to 99.5 % of the weight content of the water-insoluble or sparingly water-soluble

pigmentation $\Sigma (A + B + C)$, and the particle size substance A, based on the particle size transfer value d_{99} measured with a Mastersizer of type S from Malvern Instruments, is less than 10 μm , and wherein said $\Sigma (A + B + C)$ relative to the sum of the total pigmentation $\Sigma (A + B + C + D)$ is 30wt.%.

37. (canceled)

38. (canceled)

39. (previously presented) A mixture according to claim 35, wherein substance A has a steep particle size distribution in which the passage value d_{99} has a factor of up to 12 relative to the passage value d_{10} .

40. (previously presented) A mixture according to claim 35, wherein the particle size passage value d_{99} of substance B is in the range from 1 to 30 μm .

41. (previously presented) A mixture according to claim 39, wherein the average particle size d_{50} of substance B is in the range from 0.1 to 20 μm when added to the mixture.

42. (previously presented) A mixture according to claim 35, wherein the average particle size d_{50} of substance B is greater than the average particle size d_{50} of substance A by a factor of 1.5 to 7 when added to the mixture.

43. (previously presented) A mixture according to claim 35, wherein substance C has a particle size passage value d_{99} in the range from 0.05 to 20 μm when added to the mixture.

44. (previously presented) A mixture according to claim 35, wherein substance C has an average particle size d_{50} in the range from 0.01 to 10 μm when added to the mixture.

45. (previously presented) A mixture according to claim 35 wherein the average particle size d_{50} of substance C is greater than the average particle size d_{50} of the electrically conductive hard particles A by a factor of 0.1 to 4.

46. (previously presented) A mixture according to claim 35, wherein the mixture comprises content of 10 to 80 wt.% of substance A is 0.1 to 16 wt.% of substance B, in each case based on the weight of the solid in the wet lacquer.

47. (currently amended) A mixture according to claim 35, wherein the mixture has a content of substance C of ~~at least some up to 0~~ up to 75 wt.%, based on the weight of the solid in the wet lacquer.

48. (previously presented) A mixture according to claim 35, wherein substance D has an average particle size d_{50} in the range from 0.01 to 5 μm when added to the mixture.

49. (previously presented) A mixture according to claim 35 wherein substance D has a particle size passage value d_{99} in the range from 0.03 to 10 μm .

50. (canceled)

51. (previously presented) A mixture according to claim 49, wherein substance C is carbon black.

52. (previously presented) A mixture according to claim 35, wherein at least 30 wt.% of substance A comprises oxides or phosphides substantially based on aluminum, iron, cobalt, copper, manganese, molybdenum, nickel, niobium, tantalum, titanium, vanadium, tungsten, zinc or tin.

53. (previously presented) A mixture according to claim 35, wherein substance B predominantly or entirely comprises graphite, sulfide, selenide, telluride, an antimony-containing sulfide, a tin-containing sulfide, a molybdenum-containing sulfide or/and tungsten-containing sulfide.

54. (previously presented) A mixture according to claim 35 that contains not more than 0.5 wt.% of wax or a substance having wax-like properties.

55. (previously presented) A mixture according to claim 53, that contains not more than 0.2 wt% wax or a substance having wax-like properties.

56. (previously presented) A mixture according to claim 54, wherein the mixture does not contain wax or a substance having wax-like properties.

57. (previously presented) A process comprising applying the mixture of claim 35 to a substrate.

58. (previously presented) A process according to claim 57, wherein the substrate is precoated.

59. (previously presented) A process according to claim 57, comprising drying the mixture to form a coating on said substrate.

60. (previously presented) The process according to claim 59, wherein substance A is ground.

61. (previously presented) A process according to claim 60, wherein the over-sized particles of substance A are predominantly comminuted, so that a narrower particle size distribution arises.

62. (previously presented) A process according to claim 60 wherein the particle size passage value d_{99} of the electrically conductive hard particles A is not substantially greater than, no greater than or only slightly less than the average thickness of the coating.

63. (currently amended) The process according to claim 57, ~~claim 56~~ wherein the mixture applied to the substrate is dried, stoved, irradiated with free radicals or heated to form a thoroughly crosslinked, corrosion-resistant, viscoelastic coating.

64. (currently amended) The process according to claim 57 ~~claim 56~~, wherein the coating has a thickness of less than 10 μm , and measured in the dry state microscopically on a ground cross-section.

65. (currently amended) The process according to claim 57 ~~claim 56~~, wherein the mixture is free or substantially free from organic lubricants, inorganic or organic acids, heavy metals, and other cations.

66. (currently amended) The process according to claim 57 ~~claim 56~~, wherein the substrate comprises at least one metal or/and at least one alloy and is optionally precoated

67. (previously presented) The process of claim 66, wherein said substrate comprises aluminium, an aluminium, iron or magnesium alloy or steel.

68. (currently amended) The process according to claim 57 ~~claim 56~~, wherein the mixture is applied directly to a pretreatment coating on said substrate.

69. (currently amended) An electrically conductive coating prepared by applying the mixture ~~the mixture~~ according to claim 31 to a substrate to form the coating, wherein the mixture comprises and organic solvent.

70. (canceled)

71. (previously presented) A mixture according to claim 36, wherein the mixture of all the types of electrically conductive hard particles A has an average particle size d_{50} of from 0.1 to 2.5 microns.

72. (previously presented) A mixture according to claim 36, wherein the mixture of all the types of electrically conductive hard particles A has an average particle size d_{50} of from 0.2 to 2 microns.

73. (previously presented) A mixture according to claim 36, wherein the mixture of all the types of electrically conductive hard particles A has an average particle size d_{50} of from 0.2 to 2.5 microns.

74. (previously presented) A mixture comprising:
at least one substance A in the form of electrically conductive hard particle having a Mohs hardness of at least 5.5;

at least one substance B in the form of very soft or soft, inorganic, electrically conductive or semiconducting particle which are capable of sliding,

at least one substance C in the form of a metallic, soft or hard, electrically conductive or semiconducting particle or carbon black;

at least one binder; and

at least one of a crosslinking agent or a photoinitiator and optionally at least one post-crosslinking compound, one additive, one corrosion protection pigment D, one corrosion inhibitor which is not present in particle form, and at least one of organic solvent or water, wherein A, B and C are water-insoluble or sparingly water-soluble pigments, wherein the sum of the weight contents of the at least one substance B and the at least one substance C makes up 0.25 to 99.5 % of the weight content of the water-insoluble or sparingly water-soluble pigmentation $\Sigma (A + B + C)$, and the particle size substance A, based on the particle size transfer value d_{99} measured with a Mastersizer of type S from Malvern Instruments, is less than 10 μm ; wherein the mixture contains from 10 to 80 wt.% of the substance A and from 0.1 to 16 wt.% of substance B, based on the weight of the solid in the wet lacquer.

75. (previously presented) A process comprising applying the mixture of claim 71 to a substrate.

76. (previously presented) A process comprising applying the mixture of claim 72 to a substrate.

77. (previously presented) A process comprising applying the mixture of claim 73 to a substrate.

78. (previously presented) A process comprising applying the mixture of claim 74 to a substrate.

79. (previously presented) A process comprising applying the mixture of claim 36 to a substrate.

80. (previously presented) A mixture comprising:

at least one substance A in the form of electrically conductive particles, wherein the particles comprise at least one of Fe_3O_4 , Mn_3O_4 , FeMn_2O_4 borides, carbides, oxides, phosphates, phosphides, silicates, silicides, a particle having an electrically conductive coating, aluminum, iron, cobalt, copper, molybdenum, nickel, niobium, silver, tantalum, titanium, vanadium, tungsten, zinc, tin, aluminum-, iron-, cobalt-, copper-, molybdenum-, nickel-, niobium-, silver-, tantalum-, titanium-, vanadium-, tungsten-, zinc-, or a tin-containing alloy;

at least one substance B in the form of very soft or soft, inorganic, electrically conductive or semiconducting particle which are capable of sliding,

at least one substance C in the form of a metallic, soft or hard, electrically conductive or semiconducting particle or carbon black;

at least one binder; and

at least one of a crosslinking agent or a photoinitiator and optionally at least one post-crosslinking compound, one additive, one corrosion protection pigment D, one corrosion inhibitor which is not present in particle form, and at least one of organic solvent or water,

wherein A, B and C are water-insoluble or sparingly water-soluble pigments, wherein the sum of the weight contents of the at least one substance B and the at least one substance C makes up 0.25 to 99.5 % of the weight content of the water-insoluble or sparingly water-soluble pigmentation $\Sigma (A + B + C)$, and the particle size substance A, based on the particle size transfer value d_{95} measured with a Mastersizer of type S from Malvern Instruments, is less than 10 μm .